

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 27. (Cancelled)

28. (New) A suction device for an internal combustion engine comprising:
a collector into which air flows through a throttle valve; and
individual suction pipes for distributing the air to respective cylinders of the internal combustion engine from said collector,
wherein said collector and said individual suction pipes are formed as a one piece suction module, and
wherein said throttle valve is comprised of an electronically controlled throttle valve which is driven by a motor.

29. (New) A suction device for an internal combustion engine according to claim 28, wherein
said motor for driving said electronically controlled throttle valve is located in a housing in said suction module.

30. (New) A suction device for an internal combustion engine comprising:
a throttle valve for controlling a flow amount of intake air to a respective cylinder of the internal combustion engine;
individual suction pipes connected to respective cylinders of the internal combustion engine;

a collector for distributing said intake air to said individual suction pipes; and
wherein the individual suction pipes provide an air flow passage formed between an outlet port of said collector and an air intake port of one of said respective cylinders of the internal combustion engine;
wherein said air flow passage has a turned down portion; and
wherein said throttle valve is comprised of an electronically controlled throttle valve which is driven by a motor, whereby the air flow amount of said intake air to said collector is adjusted by said electronically controlled throttle valve.

31. (New) A suction device for an internal combustion engine according to claim 30,

wherein said turned down portion of said air flow passage is formed with a bend portion having more than a 90 degree bend,

whereby a flow of said intake air at said turned down portion of said air flow passage is changed to flow in an opposite direction.

32. (New) A suction device for an internal combustion engine comprising:
a throttle valve for controlling a flow amount of intake air to respective cylinders of the internal combustion engine;

individual suction pipes connected to said respective cylinders of the internal combustion engine;

a collector for distributing said intake air to said individual suction pipes; and
wherein the individual suction pipes provide an air flow passage formed between an outlet port of said collector and an air intake port of one of said respective cylinders of the internal combustion engine,

wherein said air flow passage has an air flow passage resistance portion which gives a predetermined air flow passage resistance to said air flow in said air flow passage, and

wherein said throttle valve is comprised of an electronically controlled throttle valve which is driven by a motor, whereby a reduction of air flow rate of said intake air caused by said air flow passage resistance of said air flow passage resistance portion is compensated by said electronically controlled throttle valve.

33. (New) A suction device for an internal combustion engine according to claim 32,

wherein said air flow passage has a turned down portion, and wherein said turned down portion of said air flow passage is formed with a bend portion having more than a 90 degree bend,

whereby a flow of said intake air at said turned down portion of said air flow passage is changed to flow in an opposite direction.

34. (New) A suction device for an internal combustion engine comprising:
a throttle valve for controlling a flow amount of intake air to respective cylinders of the internal combustion engine;

individual suction pipes connected to said respective cylinders of the internal combustion engine;

a collector for distributing said intake air to said individual suction pipes; and
a motor for operating said throttle valve,

wherein said throttle valve is comprised of an electronically controlled throttle valve which is driven by said motor,

wherein said individual suction pipes and said collector are formed as an assembly body,

wherein said electronically controlled throttle valve and said motor are formed as a throttle valve means,

wherein said throttle valve means is located on said assembly body, and wherein said intake air flow amount to said collector is controlled in accordance with a rotation of said motor.

35. (New) A suction device for an internal combustion engine according to claim 34,

wherein, on an upper portion of said assembly body, an air cleaner portion and at least one air flow passage, which is formed between an outlet port of said collector and an air intake port of one of said respective cylinders of the internal combustion engine, are provided.

36. (New) A suction device for an internal combustion engine according to claim 34,

wherein an air cleaner case for receiving an air cleaner is installed on said assembly body; and

wherein said assembly body and said air cleaner case are connected by said throttle valve means.

37. (New) A suction device for an internal combustion engine comprising:
a throttle valve for controlling a flow amount of intake air to respective cylinders of the internal combustion engine;

individual suction pipes connected to said respective cylinders of the internal combustion engine;

a collector for distributing said intake air to said individual suction pipes; and wherein the individual suction pipes provide an air flow passage formed between an outlet port of said collector and an air intake port of one of said respective cylinders of the internal combustion engine;

wherein said air flow passage forms a roundabout course in which said air flow passage starts from said outlet portion of said collector and goes in a direction away from said intake port of said respective cylinder of the internal combustion engine and subsequently bends to go in a direction toward said intake port of said respective cylinder of the internal combustion engine.

38. (New) A suction device for an internal combustion engine comprising:
a collector into which air flows through a throttle valve; and

individual suction pipes for distributing the air to respective cylinders of the internal combustion engine from said collector, wherein said collector and said individual suction pipes are formed as a one piece suction module, and

a control unit;

an electric motor coupled to said throttle valve;

wiring coupling said control unit to said electric motor, whereby said throttle valve is electrically controlled by said electric motor in response to electric signals provided to said electric motor through said wiring.

39. (New) A suction device for an internal combustion engine according to claim 38, wherein said motor for electronically controlling said throttle valve is located in a housing in said suction module.

40. (New) A suction device for an internal combustion engine according to claim 38, wherein an air flow amount of said intake air to said collector is adjusted by said throttle valve in response to electric signals provided to said electric motor from said control unit through said wiring.

41. (New) A suction device for internal combustion engine comprising:
a collector into which air flows through a throttle valve; and
individual suction pipes for distributing the air to a respective cylinder from said collector;

wherein said collector and said individual suction pipes are comprised of a suction module of one piece; and

wherein there is a single passage extending from an inlet of the device to the collector, said throttle valve is the single valve in the passage, and the throttle valve is mounted in a throttle portion of the passage;

wherein said throttle valve is comprised of an electronic controlling throttle valve which is driven by a motor, mounted on the throttle portion; and

wherein the passage contains an air filter.

42. (New) A device according to claim 41, wherein there is an air quantity detecting means in the passage, the air quantity detecting means being between the air filter and the throttle portion.

43. (New) A suction device for internal combustion engine comprising:
a collector into which air flows through a throttle valve; and
individual suction pipes for distributing the air to a respective cylinder from
said collector,
wherein said collector and said individual suction pipes are comprised of a
suction module of one piece;
wherein there is a passage extending from an inlet of the device to the
collector, said throttle valve is in the passage, and the throttle valve is mounted in a
throttle portion of the passage,
wherein said throttle valve is comprised of an electronic controlling throttle
valve which is driven by a motor, mounted on the throttle portion; and
wherein the passage also contains an air filter, and the passage divides into
two sub-passages downstream of said air filter, and said throttle valve is formed by
two valves which are both driven by the motor.

44. (New) A suction device for internal combustion engine comprising:
a collector into which air flows through a throttle valve; and
individual suction pipes for distributing the air to a respective cylinder from
said collector;
wherein said collector and said individual suction pipes are comprised of a
suction module of one piece; and
wherein there is a single passage extending from an inlet of the device to the
collector, said throttle valve is the single valve in the passage, and the throttle valve
is mounted in a throttle portion of the passage;

wherein said throttle valve is comprised of an electronic controlling throttle valve which is driven by a motor, mounted on the throttle portion; and
wherein the passage contains an air filter, wherein the part of the passage containing the air filter is on an upper surface of the suction module.

45. (New) A suction device for internal combustion engine comprising:
a collector into which air flows through a throttle valve; and
individual suction pipes for distributing the air to a respective cylinder from said collector;

wherein said collector and said individual suction pipes are comprised of a suction module of one piece; and

wherein there is a single passage extending from an inlet of the device to the collector, said throttle valve is the single valve in the passage, and the throttle valve is mounted in a throttle portion of the passage;

wherein said throttle valve is comprised of an electronic controlling throttle valve which is driven by a motor, mounted on the throttle portion; and

wherein the passage contains an air filter, wherein the throttle portion is on a side surface of the suction module.

46. (New) A suction device for internal combustion engine comprising:
a collector into which air flows through a throttle valve; and
individual suction pipes for distributing the air to a respective cylinder from said collector;

wherein said collector and said individual suction pipes are comprised of a suction module of one piece; and

wherein there is a single passage extending from an inlet of the device to the collector, said throttle valve is the single valve in the passage, and the throttle valve is mounted in a throttle portion of the passage;

wherein said throttle valve is comprised of an electronic controlling throttle valve which is driven by a motor, mounted on the throttle portion; and

wherein the passage contains an air filter, wherein the suction pipes are in a part of the suction module between the collector and the air filter.